

207

SUCCESSFUL REARING OF THE DOTTED RUSTIC
SUCCESSFUL REARING OF THE DOTTED RUSTIC:
RHYACIA SIMULANS (HUFNAGEL)
(LEP.: NOCTUIDAE)

By P. CONVEY*

A specimen of *Rhyacia simulans* (Hufn.) was caught in the Winchester College Natural History Society's mercury-vapour trap run in the College grounds on 2nd September 1980. This in itself constitutes an interesting record, the species usually being extremely scarce or absent in the county of Hampshire (Goater 1974), and followed the capture of another specimen on 6th August 1980 in the same trap.

The specimen was kept overnight before its identity was confirmed by Col. D. H. Sterling, and was discovered to be female when several ova were found in the collecting box. The ova, apparently previously undescribed (Heath 1979), are creamy-white at first, flattened hemispherical in shape, finely ribbed. The colour darkens to dark grey a few days before hatching. The female, as mentioned, will lay in an empty container, but when given cut couch-grass and dandelion leaves, lays with much greater readiness, and, over a period of a fortnight, laid approximately 850 ova. These were mostly in strings of from 1 to 10 ova in relatively concealed positions, for instance alongside veins and under the folded edges of dandelion leaves, and along the midrib of couch-grass. Very few were laid on dock leaves which were also provided.

Of the 850 ova, virtually all formed up, but only a third hatched over a period from ten days to four weeks after being laid. Of note is the observation that ova from the same string, laid within seconds of each other, show this variation in hatching period. The larvae have been described elsewhere (e.g. Haggett 1968), but the rearing technique used may be of interest.

The young larvae were provided with a mixture of cut couch-grass and dandelion. Most fed immediately on dandelion, although a few seemed to take couch-grass in preference. As these matured they all transferred to dandelion. No difficulties were experienced until large losses between the third and fourth instars. The reason for this was not clear, although possible explanations could be: poor foodplant, damping or overcrowding. The two lepidopterists who received some of the ova reported the loss of their complete stock, polluted foodplant being a suggested, but not proven, cause. Larvae ready for pupation left the foodplant and wandered around their box. Some of these were placed on loose peat, where they quickly burrowed. Others, not provided with peat, made a small chamber in the layers of paper lining the box. These were carefully removed to the surface of peat when near enough pupation to have stopped crawling, and more than one third pupated successfully. Six pupae were obtained and ten larvae died just before pupation. Virtually all the larvae allowed to burrow were found to

*37 Colley Close, Winchester, Hampshire SO23 7ES.